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ABSTRACT

Award patterns of master's degrees to women in academic years 1970-71 and 1975-76 are examined based on data collected through the annual Survey of Degrees and Other Formal Awards Conferred. In 1971, 231,000 master's degrees were awarded in the United States, and 40 percent were awarded to women. In 1976, the total number awarded was 313,000, and those awarded to women had increased to 46 percent. In 1971, women predominated in six fields: education, foreign languages, health professions, home economics, letters, and library science. In 1976, women still predominated in the same six traditionally feminine fields, but women increased their percentage representation in 20 out of 24 fields, suggesting a general, though small, tendency among women to become less tradition-bound in selecting their field of study. The two fields in which women constituted an overwhelming majority in 1971 (home economics and library science) had declined slightly by 1976, and the fields in which women were at least represented in 1971 showed the largest increases in the 1976 data. Education continued to be the favorite field, accounting for 57 percent of all master's degrees awarded to women. Data are presented on the percentage distribution of degrees by academic field for both men and women for 1971 and 1976. Appendices provide data or the numbers and percentages of degrees awarded to women by academic field for each year from 1970-71 through 1975-76. (SW)

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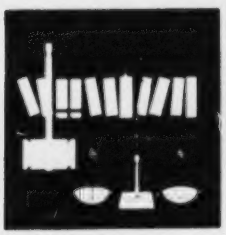

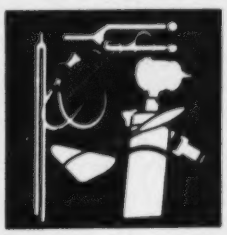

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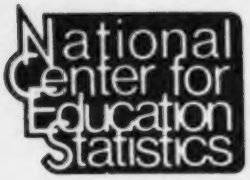

Master's Degree Awards to Women

by
George H. Brown

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Master's Degree Awards to Women

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This report is one of a series concerned with changing trends in degree awards to women. Earlier reports in the series focused on doctoral and bachelor's degrees; the last of the projected series will cover first-professional degrees.

The data on which these reports are based were collected through the annual Survey of Degrees and Other Formal Awards Conferred [part of the Higher Education General Information Survey (HEGIS)].

This report examines the award patterns of master's degrees to women in academic years 1970-71 and 1975-76. For convenience, each academic year is referred to by the year in which it ended; e.g., 1971. Degree award data for the years between 1971 and 1976 are presented in the appendix.

Overview

In 1971, 231,000 master's degrees were awarded in the United States;[1/] 40 percent of these degrees were awarded to women. In 1976, the total number awarded was 313,000, and those awarded to women had increased to about 145,000 (or 46 percent). In absolute numbers, degrees awarded to men increased by 29,000, and

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1/ Includes outlying territories, such as Guam and Puerto Rico, which account for approximately 1 percent of the total number of degrees awarded.

to women, by 52,000.

Field of Study [2/]

Table 1 shows the total number of master's degrees awarded and the percentage awarded to women in each of 24 discipline divisions for 1971 and 1976. In 1971, women predominated in six fields: education (56 percent), foreign languages (65 percent), health professions (55 percent), home economics (94 percent), letters (57 percent), and library science (81 percent). In 1976, women still predominated in the same six traditionally feminine fields.

Table 1.--Percentages of women among master's degree recipients, by discipline division: Aggregate United States, 1971 and 1976

Discipline division	1971		1976		Percentage point change
	Total master's degrees awarded	Percent awarded to women	Total master's degrees awarded	Percent awarded to women	
Agriculture and natural resources	2,458	5.9	3,351	14.3	8.4
Architecture and environmental design	1,724	14.1	3,215	20.8	6.7
Area studies	1,017	39.0	945	45.3	6.3
Biological sciences	5,756	33.8	6,621	31.8	- 2.0
Business and management	26,654	3.9	42,728	11.6	7.7
Communications	1,856	34.6	3,128	41.8	7.2
Computer and information sciences	1,588	10.3	2,603	14.5	4.2
Education	89,067	56.2	128,410	64.3	8.1
Engineering	16,457	1.1	16,349	3.6	2.5
Fine and applied arts	6,678	47.4	8,820	48.9	1.5
Foreign languages	4,779	65.4	3,541	66.7	1.3
Health professions	5,902	55.4	12,696	66.5	11.1
Home economics	1,453	93.9	2,187	91.5	- 2.4
Law	955	4.8	1,442	12.0	7.2
Letters	12,743	57.5	11,356	58.3	.8
Library science	7,028	81.3	8,084	78.3	- 3.0
Mathematics	5,201	29.3	3,863	34.0	4.7
Military sciences	2	0	0	0	0
Physical sciences	6,386	13.4	5,485	15.0	1.6
Psychology	4,438	37.2	7,859	46.7	9.5
Public affairs and services	8,406	48.8	17,333	45.3	- 3.5
Social sciences	16,522	28.5	15,902	31.6	3.1
Theology	2,710	24.4	3,292	32.1	7.7
Interdisciplinary studies	1,706	35.2	2,791	46.5	11.3
All discipline divisions	231,486	40.1	313,001	46.4	6.3

2/ For detailed information regarding the subfields within each discipline division the following NCES publication should be consulted: Earned Degrees Conferred, 1975-76, Summary Data. This report covers the years 1971-72 through 1975-76. Detailed data for 1970-71 have not been published but can be made available upon request to National Center for Education Statistics (Attention: Dr. George H. Brown), 400 Maryland Avenue, S.W., Washington, D.C. 20202.

It is interesting to note that women increased their percentage representation in 20 out of 24 fields. This fact suggests that there is a general, though small, tendency among women to become less tradition-bound in selecting their field of study.

Although women continued to predominate in the same traditionally feminine fields, it is of interest to determine whether any trends can be discerned which suggest that changes are occurring. Is the concentration of women in certain fields increasing or decreasing? Is the greatest growth in percentage representation taking place in the traditionally feminine fields, or elsewhere? To answer this question 23 fields[3/] were grouped on the basis of women's percentage representation in 1971, and the average change in percentage representation was computed for each. The results were as follows:

Women's percentage representation in 1971	Discipline division	Average percentage point change in 1976
80-99	Home economics, library science	- 2.7
60-79	Foreign languages	1.3
40-59	Public affairs, fine and applied arts, letters, health professions, education	3.6
20-39	Theology, social sciences, mathematics, interdisciplinary studies, psychology, communications, biological sciences, area studies	6.0
0-19	Law, engineering, business and management agriculture, physical sciences, computer science, architecture	6.4

It is apparent that the two fields in which women constituted an overwhelming majority in 1971 (home economics and library science) had actually declined slightly by 1976. The fields in which women were least represented in 1971 showed the largest increases in the 1976 data. An inverse relationship is clearly apparent between the magnitude of the women's percentage representation in 1971, and the amount of increase evident in 1976. Fields which traditionally have been regarded as either women's fields or men's fields are becoming less dominated by one sex.

3/ Military science was omitted in this tabulation because of its minute size. The total of master's degrees awarded in this field was only 2 in 1971, and 0 in 1976.

What are the most popular degree fields for women and how have these changed over the two points in time? Table 2 addresses this question and also shows comparative data for men. It is evident that education has been by far the most popular degree field for both sexes, although in both 1971 and 1976 it was roughly twice as popular among women as among men.

It is also clear that education is the only field which accounted for a substantial percentage of all master's degree awards to women, slightly over half in both years. No other field accounted for more than 8 percent. The five most popular degree fields for women in 1971 were: education (54 percent), letters (8 percent), library science (6 percent), social sciences (5 percent), and public affairs and services (4 percent). These five fields accounted for 77 percent of all master's degrees awarded to women in 1971. In 1976, the situation had changed very little. Four of these fields continued to be among the top five. Social sciences was replaced by health professions, although the actual change in percentage value was very slight for both fields. In 1976, the top five fields still accounted for 77 percent of the total - indicating little change in the amount of diversification in fields of interest to women.

Education was also the most popular field in both years for men, although it accounted for only 28 and 27 percent, respectively, of all master's degrees awarded to men. Business and management, and engineering, which ranked second and third for men, also accounted for substantial percentages of all the degrees awarded to men.

The top five degree fields for men accounted for 71 percent of all degrees awarded to men in both 1971 and 1976. It will be recalled that, for women, the corresponding percentage was 77 percent, which indicates that men are still somewhat more diversified in their fields of interest than are women.

The most interesting findings in this report may be summarized as follows:

(1) Women increased their percentage representation in 20 out of 24 discipline divisions.

(2) Increases in women's percentage representation tended to be greatest in those fields where their representation had been smallest.

(3) Education continued to be the favorite field, accounting for 57 percent of all master's degrees awarded to women.

Table 2. --Percentage distribution of master's degrees, by sex and discipline division: Aggregate United States, 1971 and 1976

Discipline division	Percentage of degrees awarded to: Women 1971	Women 1976	Men 1971	Men 1976
Agriculture and natural resources	*	*	1.7	1.7
Architecture and environmental design	*	*	1.1	1.5
Area studies	*	*	*	*
Biological sciences	2.1	1.4	2.7	2.7
Business and management	1.1	3.4	18.5	22.5
Communications	*	*	*	1.1
Computer and information sciences	*	*	1.0	1.3
Education	53.8	56.8	28.2	27.3
Engineering	*	*	11.7	9.4
Fine and applied arts	3.4	3.0	2.5	2.7
foreign languages	3.3	1.6	1.2	*
Health professions	3.5	5.8	2.9	2.5
Home economics	1.5	1.4	*	*
Law	*	*	*	*
Letters	7.9	4.6	3.9	2.8
Library science	6.1	4.3	*	1.0
Mathematics	1.6	*	2.7	1.5
Military science	0.0	0.0	0.0	0.0
Physical sciences	*	*	4.0	2.8
Psychology	1.8	2.5	2.0	2.5
Public affairs and services	4.4	5.4	3.1	5.7
Social sciences	5.1	3.5	8.5	6.5
Theology	*	*	1.5	1.3
Interdisciplinary studies	*	1.2	*	1.2
All discipline divisions	100.0	100.0	100.0	100.0

*Less than 1.0 percent.
NOTE.--Details do not add to 100.0 percent because of rounding.

APPENDIX

Appendix.--Percentage of women among master's degree recipients,

Discipline division	1970-71		1971-72		1972-73	
	Total degrees	Percent women	Total degrees	Percent women	Total degrees	Percent women
Agriculture and natural resources	2,458	5.9	2,691	7.1	2,822	7.9
Architecture and environmental design	1,724	14.1	1,928	14.6	2,319	15.7
Area studies	1,017	39.0	978	40.7	1,032	37.0
Biological sciences	5,756	33.8	6,126	33.1	6,294	30.6
Business and management	26,654	3.9	30,511	3.9	31,239	4.9
Communications	1,856	34.6	2,200	34.4	2,406	35.7
Computer and information sciences	1,588	10.3	1,977	11.4	2,113	10.6
Education	89,067	56.2	98,280	57.3	105,646	58.2
Engineering	16,457	1.1	16,966	1.6	16,632	1.7
Fine and applied arts	6,678	47.4	7,540	46.3	7,254	44.8
Foreign languages	4,779	65.4	4,640	65.1	4,323	64.3
Health professions	5,902	55.4	7,361	56.4	8,504	57.5
Home economics	1,453	93.9	1,666	92.7	1,679	90.7
Law	955	4.8	932	5.8	1,071	7.5
Letters	12,743	57.5	12,759	57.7	12,384	57.1
Library science	7,028	81.3	7,435	79.9	7,743	78.1
Mathematics	5,021	29.3	5,209	29.8	5,033	29.9
Military science	2	-	-	-	-	-
Physical sciences	6,386	13.4	6,307	14.1	6,274	13.5
Psychology	4,438	37.2	5,293	38.4	5,882	40.2
Public affairs and services	8,406	48.8	9,608	47.0	11,190	46.7
Social sciences	16,522	28.5	17,469	28.2	17,361	27.6
Theology	2,710	24.4	2,755	23.4	2,778	26.7
Interdisciplinary studies	1,706	35.2	2,143	39.2	2,546	45.6
All discipline divisions	231,486	40.1	252,774	40.6	264,525	41.4

by discipline division: 1970-71 through 1975-76

1973-74		1974-75		1975-76	
Total degrees	Percent women	Total degrees	Percent women	Total degrees	Percent women
2,939	9.8	3,076	11.8	3,351	14.3
2,733	18.4	2,953	20.3	3,215	20.8
1,142	38.9	1,140	43.2	945	45.3
6,581	30.6	6,591	30.0	6,621	31.8
32,820	6.6	36,450	8.4	42,728	11.6
2,642	36.8	2,796	42.1	3,128	41.8
2,276	12.9	2,299	14.7	2,603	14.5
112,739	59.9	120,233	62.2	128,410	64.3
15,385	2.3	15,359	2.4	16,349	3.6
8,001	45.9	8,363	46.8	8,820	48.9
3,991	66.1	3,826	66.9	3,541	66.7
9,741	60.2	10,842	61.8	12,696	66.5
1,869	91.1	1,901	89.3	2,187	91.5
1,181	7.1	1,245	8.0	1,442	12.0
12,165	56.6	11,873	58.8	11,356	58.3
8,185	77.8	8,123	78.8	8,084	78.3
4,840	31.0	4,338	32.9	3,863	34.0
-	-	-	-	-	-
6,087	14.6	5,830	14.5	5,485	15.0
6,616	39.8	7,104	42.9	7,859	46.7
12,694	45.3	15,505	44.6	17,333	45.3
17,297	28.8	16,942	30.0	15,902	31.6
2,898	27.2	3,230	30.9	3,292	32.1
3,437	45.8	3,632	47.7	3,791	46.5
278,259	43.1	293,651	44.8	313,001	46.4